AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1.   [Previously Amended] A method of enabling policy-based traffic forwarding in a data network having at least two area border routers (ABRs), the method comprising steps of:

generating a link state advertisement (LSA) message, and asserting a route tag in respect of the generated LSA message; and

at each ABR receiving the LSA message, controlling propagation of the received LSA, into an area of the data network hosted by the ABR, using a respective forwarding policy having a match criteria corresponding to the asserted route tag;

wherein the respective forwarding policy of a first ABR differs from that of a second ABR, such that the received LSA message is flooded into the area hosted by the first ABR, and not flooded into the respective area hosted by the second ABR.

2.   [Original] A method as claimed in claim 1, wherein the data network is an Open Shortest Path first (OSPF) network.

3.   [Original] A method as claimed in claim 1, wherein the route tag comprises one of:

an internal route tag associated with an address located within an autonomous system of the data network; and

an external route tag associated with an address located outside the autonomous system.

4.   [Currently Amended] A method as claimed in claim 1, wherein the step of asserting a route tag comprises steps of:

setting a route tag value respecting the <u>generated</u> LSA; and

inserting the route tag value into a predetermined field of the <u>generated</u> LSA.

5.   [Currently Amended] A method as claimed in claim 4, wherein the route tag value is set by a policy having a match criteria corresponding to a predetermined attribute of the <u>generated</u> LSA.

6.   [Original] A method as claimed in claim 5, wherein the predetermined attribute comprises any one or more of: a source address; a source area; a destination address; and a destination area.

7.   [Currently Amended] A method as claimed in claim 4, wherein the <u>generated</u> LSA is a Type-5 LSA, and the step of inserting the route tag comprises a step of inserting the route tag value into an external route tag field of the <u>generated</u> LSA.

8.   [Original] A method as claimed in claim 4, wherein the step of inserting the route tag comprises a step of inserting the route tag value into an internal route tag field of a modified Type-3 LSA.

9.   [Cancelled]

10.   [Currently Amended] A method as claimed in claim 1, wherein the forwarding policy corresponds to one of:

a pass decision, in which the <u>received</u> LSA is forwarded to a downstream link; and

a discard decision, in which the <u>received</u> LSA is discarded without forwarding.

11.   [Currently Amended] A method as claimed in claim 10, wherein implementation of the forwarding policy further comprises a step of updating a forwarding table using information contained in the <u>received</u> LSA as either one of: an inclusion route; and an exclusion route.

12.   [Previously Amended] A router for enabling policy-based traffic forwarding in a data network having at least two routers, the router comprising means for controlling propagation of a received link state advertisement (LSA) message, into an area of the data network hosted by the router, using a respective forwarding policy having a match criteria corresponding to a route tag asserted in respect of the LSA, wherein the forwarding policy of the router differs from that of a second router, such that the received LSA message is flooded into the area hosted by the router, and not flooded into a respective second area hosted by the second router.

13.   [Original] A router as claimed in claim 12, wherein the data network comprises an Open Shortest Path first (OSPF) network.

14.   [Original] A router as claimed in claim 13, wherein the router comprises any one of an autonomous system border router, and an area border router.

15.   [Original] A router as claimed in claim 12, wherein the route tag comprises one of:

an internal route tag associated with an address located within an autonomous system of the data network; and

an external route tag associated with an address located outside the autonomous system.

16.   [Cancelled]

17.   [Previously Presented] A router as claimed in claim 12, wherein the forwarding policy corresponds to one of:

a pass decision, in which the LSA is forwarded to a downstream link; and

a discard decision, in which the LSA is discarded without forwarding.

18.   [Original] A router as claimed in claim 17, wherein the means for implementing the forwarding policy further comprises means for updating a forwarding table using

information contained in the LSA as either one of: an inclusion route and an exclusion route.

19. [Original] A router as claimed in claim 12, further comprising means for asserting the route tag in respect of the LSA.

20. [Original] A router as claimed in claim 19, wherein the means for asserting the route tag comprises:

means for setting a route tag value respecting the LSA; and

means for inserting the route tag into a predetermined field of the LSA.

21. [Original] A router as claimed in claim 20, wherein the means for setting the route tag value comprises a policy having a match criteria corresponding to one or more predetermined attributes of the LSA.

22. [Original] A router as claimed in claim 21, wherein the one or more predetermined attributes comprise any one or more of: a source address; a source area; a destination address; and a destination area.

23. [Original] A router as claimed in claim 20, wherein the router is an ASBR, and the means for inserting the route tag is adapted to insert the route tag value into an external route tag field of a Type-5 LSA.

24. [Original] A router as claimed in claim 20, wherein the router is an ABR, and the means for inserting the route tag is adapted to insert the route tag value into an internal route tag field of a modified Type-3 LSA.

25. [Previously Amended] A software program stored on a computer readable medium for controlling a router to enable policy-based traffic forwarding in a data network having at least two routers, each router hosting an area of the data network, the software program comprising program code adapted to control propagation of a

received link state advertisement (LSA) message, into a respective area of the data network hosted by the router, using a respective forwarding policy having a match criteria corresponding to a route tag asserted in respect of the LSA, wherein the respective forwarding policy of a first router differs from that of a second router, such that the received LSA message is flooded into the area hosted by the first router, and not flooded into a respective second area hosted by the second router.

26.   [Cancelled]

27.   [Previously Presented]   A software program as claimed in claim 25, wherein the program code adapted to implement the forwarding policy further comprises program code adapted to control the router to update a forwarding table using information contained in the LSA as either one of: an inclusion route and an exclusion route.

28.   [Previously Presented] A software program as claimed in claim 25, further comprising program code adapted to control the router to assert the route tag in respect of the LSA.

29.   [Previously Presented]   A software program as claimed in claim 28, wherein the program code adapted to control the router to assert the route tag comprises:

program code adapted to control the router to set a route tag value respecting the LSA; and

program code adapted to control the router to insert the route tag into a predetermined field of the LSA.

30.   [Previously Presented] A software program as claimed in claim 29, wherein the router is an ASBR, and the program code adapted to control the router to insert the route tag is adapted to control the router to insert the route tag value into an external route tag field of a Type-5 LSA.

31.   [Previously Presented] A software program as claimed in claim 29, wherein the router is an ABR, and the program code adapted to control the router to insert the route tag is adapted to control the router to insert the route tag value into an internal route tag field of a modified Type-3 LSA.